

```
#include <stdio.h>

#include <string.h>


#define MAX_USERS 5

#define MAX_FILES 5


// Each user has a name and a list of files
struct Directory {
    char userName[20];
    char fileName[MAX_FILES][20];
    int fileCount;
};


int main() {
    struct Directory dir[MAX_USERS];
    int userCount = 0;
    int choice;
    char user[20], file[20];

    while (1) {
        printf("\n--- Two Level Directory ---\n");
        printf("1. Create User\n");
        printf("2. Create File\n");
        printf("3. Show Files of User\n");
        printf("4. Show All Users and Files\n");
        printf("5. Exit\n");
        printf("Enter your choice: ");
        scanf("%d", &choice);
```

```
switch (choice) {
```

```
case 1:
```

```
    if (userCount >= MAX_USERS) {
```

```
        printf("Cannot add more users.\n");
```

```
        break;
```

```
    }
```

```
    printf("Enter user name: ");
```

```
    scanf("%s", dir[userCount].userName);
```

```
    dir[userCount].fileCount = 0;
```

```
    userCount++;
```

```
    printf("User created.\n");
```

```
    break;
```

```
case 2:
```

```
    printf("Enter user name: ");
```

```
    scanf("%s", user);
```

```
    int found = 0;
```

```
    for (int i = 0; i < userCount; i++) {
```

```
        if (strcmp(dir[i].userName, user) == 0) {
```

```
            found = 1;
```

```
            if (dir[i].fileCount >= MAX_FILES) {
```

```
                printf("File limit reached for this user.\n");
```

```
                break;
```

```
            }
```

```
            printf("Enter file name: ");
```

```
            scanf("%s", file);
```

```
            strcpy(dir[i].fileName[dir[i].fileCount], file);
```

```
        dir[i].fileCount++;  
        printf("File created.\n");  
        break;  
    }  
}  
if (!found) {  
    printf("User not found.\n");  
}  
break;
```

case 3:

```
printf("Enter user name: ");  
scanf("%s", user);  
for (int i = 0; i < userCount; i++) {  
    if (strcmp(dir[i].userName, user) == 0) {  
        printf("Files of %s:\n", user);  
        for (int j = 0; j < dir[i].fileCount; j++) {  
            printf(" %s\n", dir[i].fileName[j]);  
        }  
    }  
}  
break;
```

case 4:

```
for (int i = 0; i < userCount; i++) {  
    printf("\nUser: %s\n", dir[i].userName);  
    for (int j = 0; j < dir[i].fileCount; j++) {  
        printf(" File: %s\n", dir[i].fileName[j]);  
    }  
}
```

```
        }  
    }  
    break;  
  
case 5:  
    return 0;  
  
default:  
    printf("Invalid choice.\n");  
}  
  
}  
  
return 0;  
}
```

--- Two Level Directory ---

1. Create User
2. Create File
3. Show Files of User
4. Show All Users and Files
5. Exit

Enter your choice: 1

Enter user name: ABC

User created.

--- Two Level Directory ---

1. Create User
2. Create File
3. Show Files of User
4. Show All Users and Files
5. Exit

Enter your choice: 2

Enter user name: XYZ

User not found.

--- Two Level Directory ---

1. Create User
2. Create File
3. Show Files of User
4. Show All Users and Files
5. Exit

Enter your choice: 4

User: ABC

--- Two Level Directory ---

1. Create User
2. Create File
3. Show Files of User
4. Show All Users and Files
5. Exit

Enter your choice: 5

...Program finished with exit code 0

Press ENTER to exit console.